

## **Implement a program on Exception Handling**

1)Try-catch

```
class Main2
```

```
{
```

```
public static void main(String args[])
```

```
{
```

```
try{
```

```
    int divideByZero = 8/0;
```

```
    System.out.println("Rest of code in try block");
```

```
    }
```

```
    catch (ArithmeticException e) {
```

```
        System.out.println("ArithmeticException => " +  
e.getMessage());
```

```
    }
```

```
}
```

```
}
```

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.2283]
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C:\Users\student\Desktop\java1>javac trycatch.java

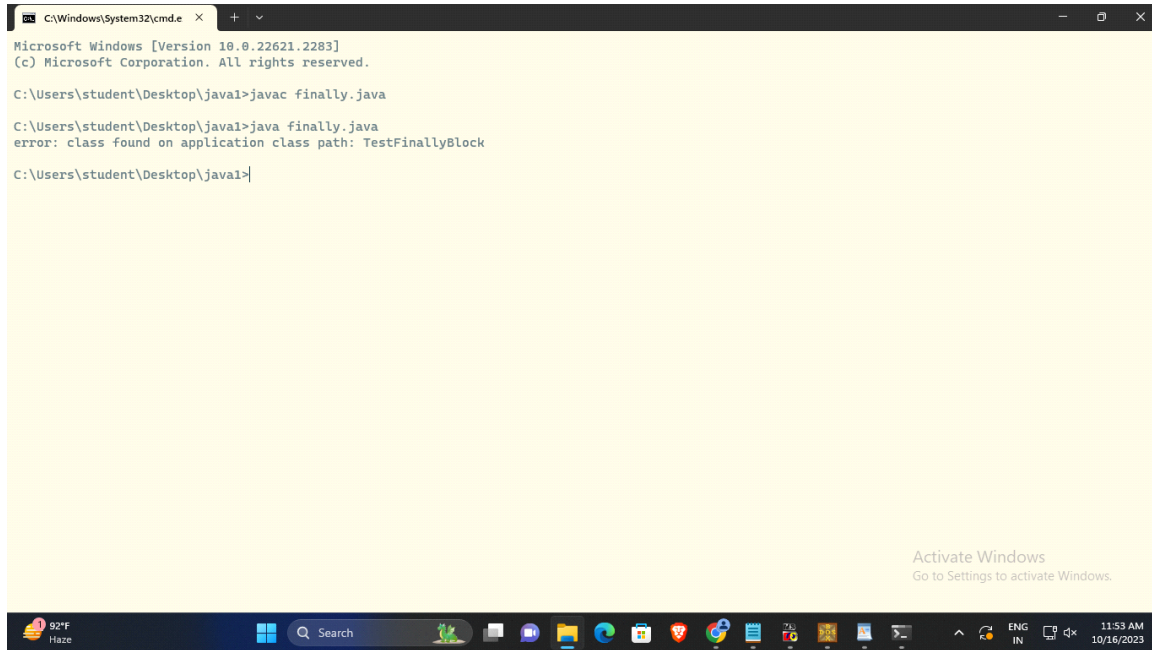
C:\Users\student\Desktop\java1>java trycatch.java
error: class found on application class path: Main2

C:\Users\student\Desktop\java1>
```

2)finally

```
class TestFinallyBlock {
    public static void main(String args[]){
        try{
            int data=25/5;
            System.out.println(data);
        }
        catch(NullPointerException e){
            System.out.println(e);
        }
        finally {
            System.out.println("finally block is always executed");
        }
    }
}
```

```
System.out.println("rest of the code...");  
}  
}
```



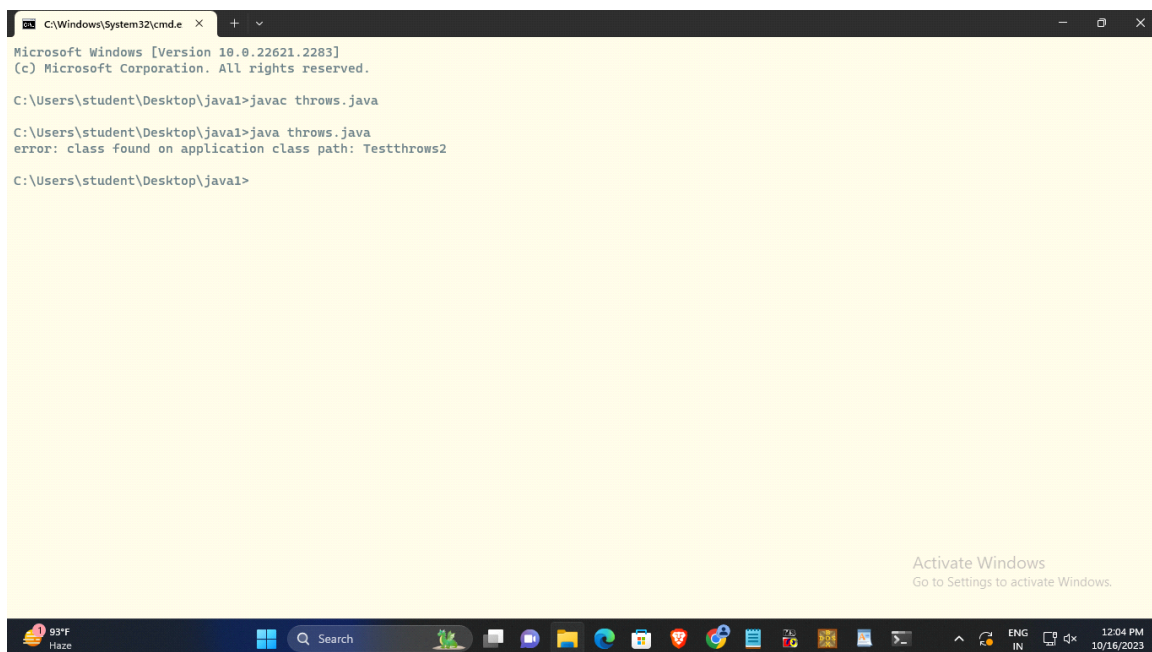
A screenshot of a Windows Command Prompt window. The title bar shows 'C:\Windows\System32\cmd.exe'. The window contains the following text:  
Microsoft Windows [Version 10.0.22621.2283]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\student\Desktop\java1>javac finally.java  
  
C:\Users\student\Desktop\java1>java finally.java  
error: class found on application class path: TestFinallyBlock  
  
C:\Users\student\Desktop\java1>|  
At the bottom right, there is a watermark that says 'Activate Windows Go to Settings to activate Windows.' The Windows taskbar is visible at the bottom with various icons and a system clock showing 11:53 AM on 10/16/2023.

3)throws

```
class Testthrows2{  
    public static void main(String args[]){  
        try{  
            M m=new M();  
            m.method();  
        }  
    }  
}
```

```
    }catch(Exception e){System.out.println("exception  
handled");}
```

```
        System.out.println("normal flow...");  
    }  
}  
  
class M{  
    void method()throws IOException{  
        throw new IOException("device error");  
    }  
}
```



```
C:\Windows\System32\cmd.exe  
Microsoft Windows [Version 10.0.22621.2283]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\student\Desktop\java1>javac throws.java  
  
C:\Users\student\Desktop\java1>java throws.java  
error: class found on application class path: Testthrows2  
  
C:\Users\student\Desktop\java1>
```

4)throw

```
class TestThrow3
{
    public static void main(String args[])
    {
        try
        {
            throw new UserDefinedException("This is user-
defined exception");
        }
        catch (UserDefinedException ude)
        {
            System.out.println("Caught the exception");
            System.out.println(ude.getMessage());
        }
    }
}

class UserDefinedException extends Exception
{
    public UserDefinedException(String str)
    {
        super(str);
    }
}
```

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.2283]
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C:\Users\student\Desktop\java1>javac throw.java

C:\Users\student\Desktop\java1>java throw.java
error: class found on application class path: TestThrow3

C:\Users\student\Desktop\java1>
```

Activate Windows  
Go to Settings to activate Windows.

93°F Haze 12:08 PM 10/16/2023